



KNIGHTDALE CRAFT KITCHEN 310 ARCHITECTS 706 MONEY COURT KNIGHTDALE, NORTH CAROLINA PROJECT # ZCP-5-20

7-8-2020 SKETCH PLAN SUBMITTAL 7-7-2020 MASTER PLAN SUBMITTAL

INDEX OF SHEETS

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EXTERIOR ELEVATIONS - NEW WORK

Owner/Developer:

Money Court Property Holding, LLC 5317 Pomfret Point Raleigh, NC 27612 Contact: Kip Downer

Surveyor:

STOKES SURVEYING & MAPPING PLLC 1425-105B Rock Quarry Rd. Raleigh, NC 27610 Phone: 1.919.977.7825 Contact: Mike Stokes

Engineer:



Contact: J. Michael Stocks, PE mstocks@stocksengineering.com

ARCHITECT:

310 ARCHITECTURE + INTERIORS *302 JEFFERSON STREET #250* Raleigh, NC 27605 Phone: 919.838.9310 Contact: Paul Fox

SITE INFORMATION

LOCATION:	706 MONEY COURT KNIGHTDALE, NC
COUNTY:	
TOTAL SITE ACREAGE:	1.73 Ac.
ZONING:	
TOWNSHIP:	St. MATHEWS
PIN:	

MINIMUM BUILDING SETBACKS:		
		ACCESORY
LOT WIDTH (AT ROW):	150 '	N/A
FRONT (MIN):	<u></u> 10 '	N/A
FRONT {MAX}:	90	
SIDE (MIN):	0' OR 6;	N/A
CORNER SIDE (MIN):	10 <u>'</u>	N/A
SIDE FROM RR.GR.UR		·
AND RMX DISTRICTS	50'	50 '
REAR SETBACKS (MIN.):		, 5'
REAR SETBACKS FROM REAR LANE/ALLEY:	15' FROM	15' FROM
REAR LANE/ALLEY:	CENTERLINE	CENTERLINE
REAR FROM RR,GR,UR		
AND DMY DISTRICTS	50'	50'

EXISTING USE:	CURRENT GYM AND VACANT
PROPOSED USE:	GYM AND RESTAURANT
RESTAURANT:	±3,190 Sq. Ft.
TOTAL BUILDING SIZE:	±7,760 Sq. Ft.

RKING CALCULATIONS: IRN BOOT CAMP (INDOOR REC):	MAX: 34 (1 PER 3 PERSON CAPACITY MIN: 17 (1/2 OF MAXIMUM) (CH. 10.3.D.5.H)
AFT KITCHEN (RESTAURANT):	MAX: 48 (15 PER 1,000 SF GFA) MIN: 24 (1/2 OF MAXIMUM) (CH. 10.3.D.4.C)

...MIN OF 2 SPACES FOR 15 TO 40 VEHICLE SPACES CRAFT KITCHEN MINIMUM VEHICLE SPACES = 24 (CH. 10.3.C.2)

MAX: 82 SPACES

PARKING PROVIDED:				
EX. SPACES:	88			
PROPOSED SPACES:	79			
9 SPACES ARE BEING REPLACED	WITH AN	OUTDOOR	SEATING	PATIC
H.C. (VAN ACCESSIBLE)	5			
BICYCLE PARKING SPACES	2			

EX. IMPERVIOUS AREA:	63,	873	SF	(1.47	Ac.)	(84.76%
PRO. IMPERVIOUS AREA:	.63,9	950	SF	(1.47	Ac.)	(84.86%
LANDSCAPE AREA:	.0.2	8 Ac	s. (15.14%	3)	
RIVER BASIN:	LOW	ÆR.	NEU	JSE RI	VER	
DISTURBED AREA:	±0.	15 /	AC.			

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

Lorea M Sample City of Raleigh Development Approval

City of Raleigh Review Officer

EXISTING IRON PIPE

CALCULATED/SET POINT

TELEPHONE PEDESTAL CATV PEDESTAL

ELECTRIC PEDESTAL

WATER VALVE FIRE HYDRANT WATER METER

LIGHT POLE CLEANOUT

● SEWER MANHOLE

FES FLARED END SECTION

RCP REINFORCED CONCRETE PIPE

STANDARDS FOR THIS PROJECT, THE APPROVED STANDARDS SHALL CONTROL. TOWN OF KNIGHTDALE APPROVED STANDARDS SHALL MEAN ALL DEVELOPMENT DOCUMENTS NECESSARY FOR APPROVAL FOR THE PROPERTY INCLUDING, BUT NOT LIMITED TO, ANY SPECIAL USE PERMIT, SUBDIVISION PLAN, SITE PLAN, SUBDIVISION PLAT(S), PHASING SCHEDULE, DEVELOPMENT AGREEMENT, ANNEXATION AGREEMENT, THE TOWN OF KNIGHTDALE STANDARD SPECIFICATION AND DETAILS MANUAL AND APPLICABLE PROVISIONS OF THE NORTH CAROLINA STATE BUILDING CODE.

THESE IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE

FOLLOWING DRAWINGS AND WITH THE STANDARD SPECIFICATIONS OF THE TOWN OF KNIGHTDALE. CHECKED AND FOUND TO BE APPLICABLE TO THIS PROJECT. ALL

EXCEPTIONS TO THE APPLICABLE TOWN STANDARDS HAVE BEEN PREVIOUSLY APPROVED BY THE TOWN OF KNIGHTDALE AND SAID EXCEPTIONS ARE SHOWN ON SHEET(S)

THIS DESIGN HAS BEEN REVIEWED BY THE ENGINEER FOR THE TOWN OF KNIGHTDALE, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT CONFORMS TO THE REQUIREMENTS ESTABLISHED IN THE STANDARD

SCALE: 1" = 30'

BLN=C-1874



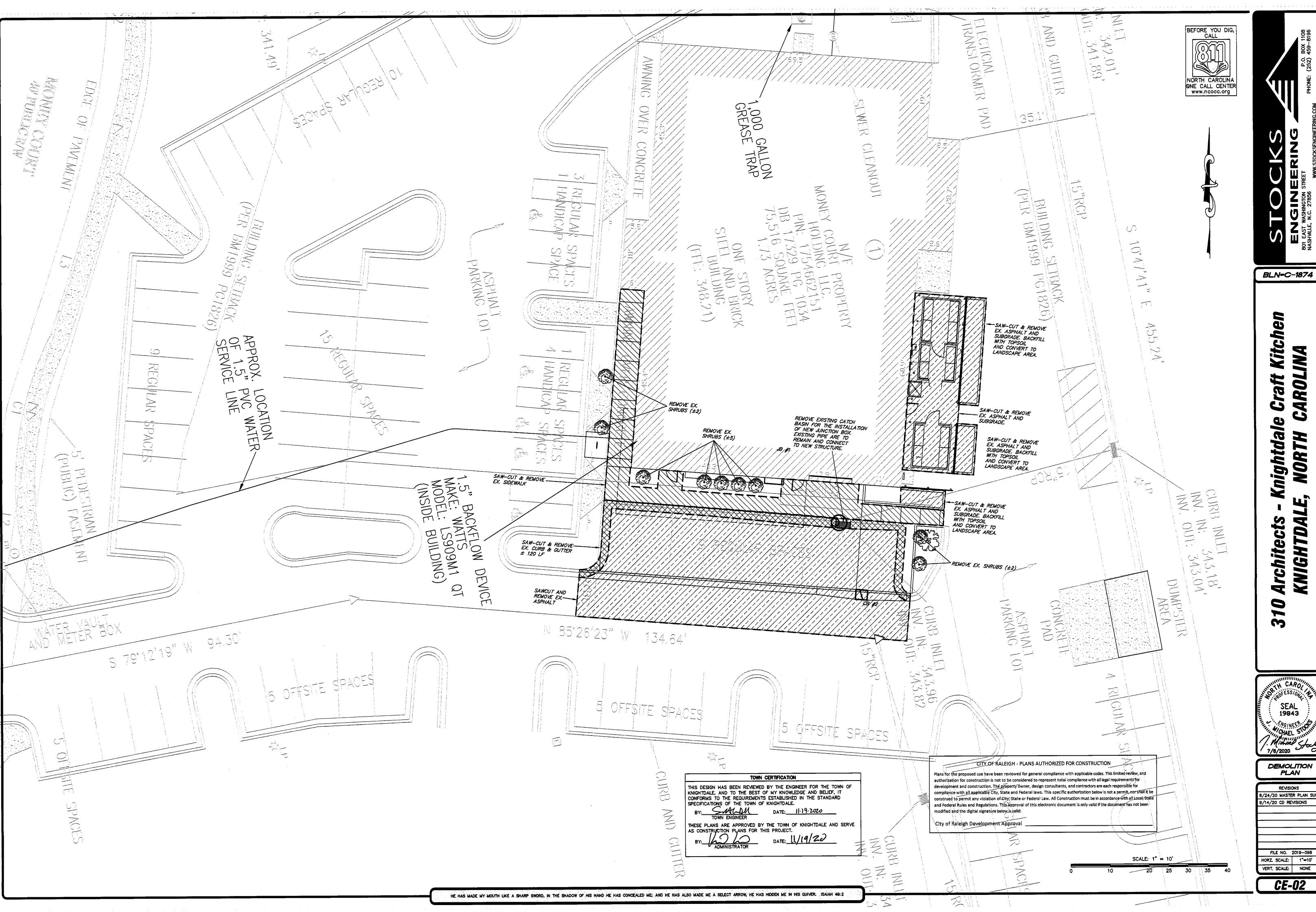
EXISTING CONDITIONS

REVISIONS /24/20 MASTER PLAN SUB 9/14/20 CD REVISIONS

FILE NO. 2019-098 HORZ. SCALE: 1"=30" VERT. SCALE: NONE

HE HAS MADE MY MOUTH LIKE A SHARP SWORD, IN THE SHADOW OF HIS HAND HE HAS CONCEALED ME: AND HE HAS ALSO MADE ME A SELECT ARROW, HE HAS HIDDEN ME IN HIS QUIVER. ISAIAH 49:2

EXISTING IMPERVIOUS SURFACE:





CAROL C ightdal VORTH

SEAL 19843 1/8/2020

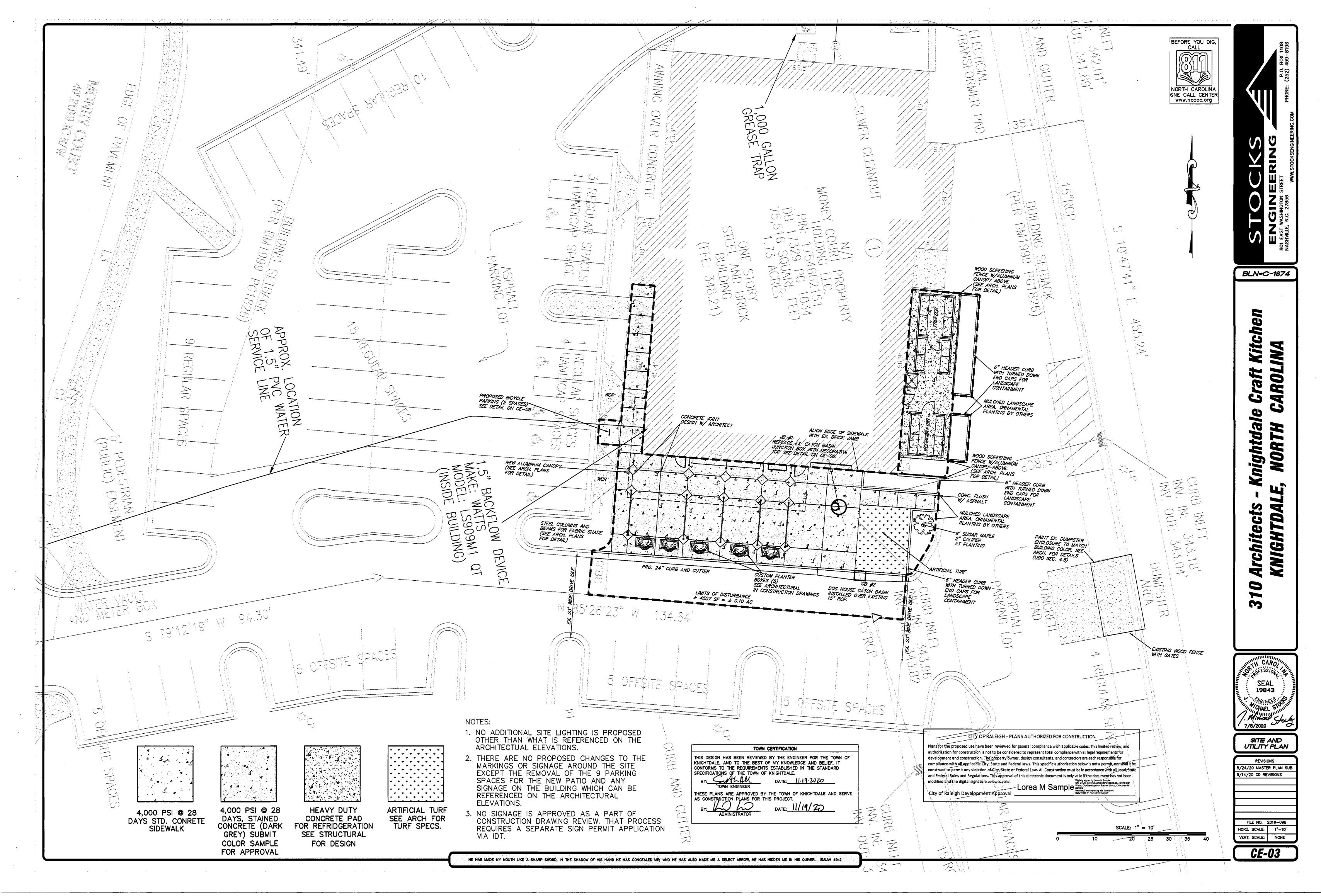
KNIGHTDA

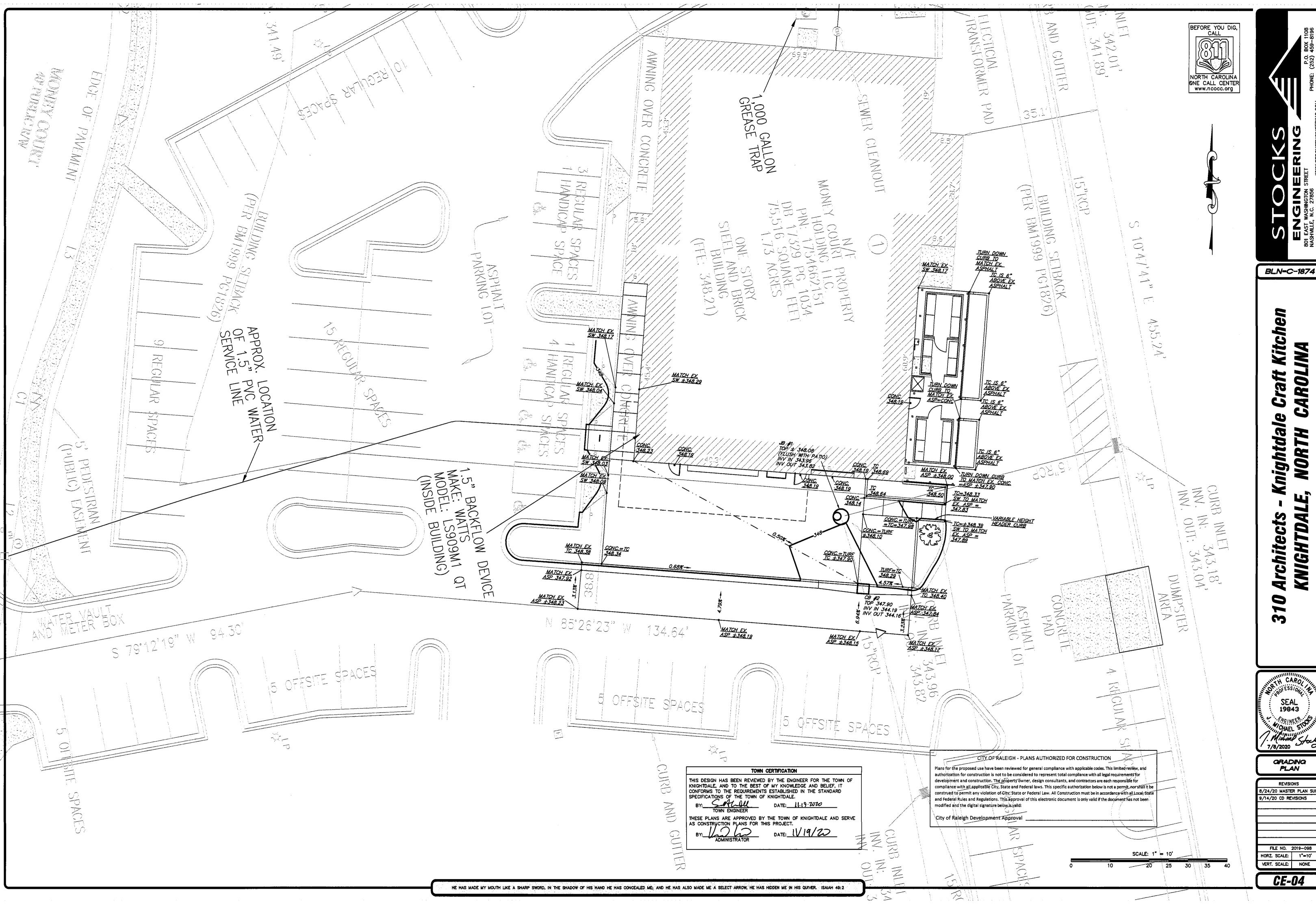
DEMOLITION PLAN

REVISIONS 8/24/20 MASTER PLAN SUB. 9/14/20 CD REVISIONS

FILE NO. 2019-098 HORZ. SCALE: 1"=10"

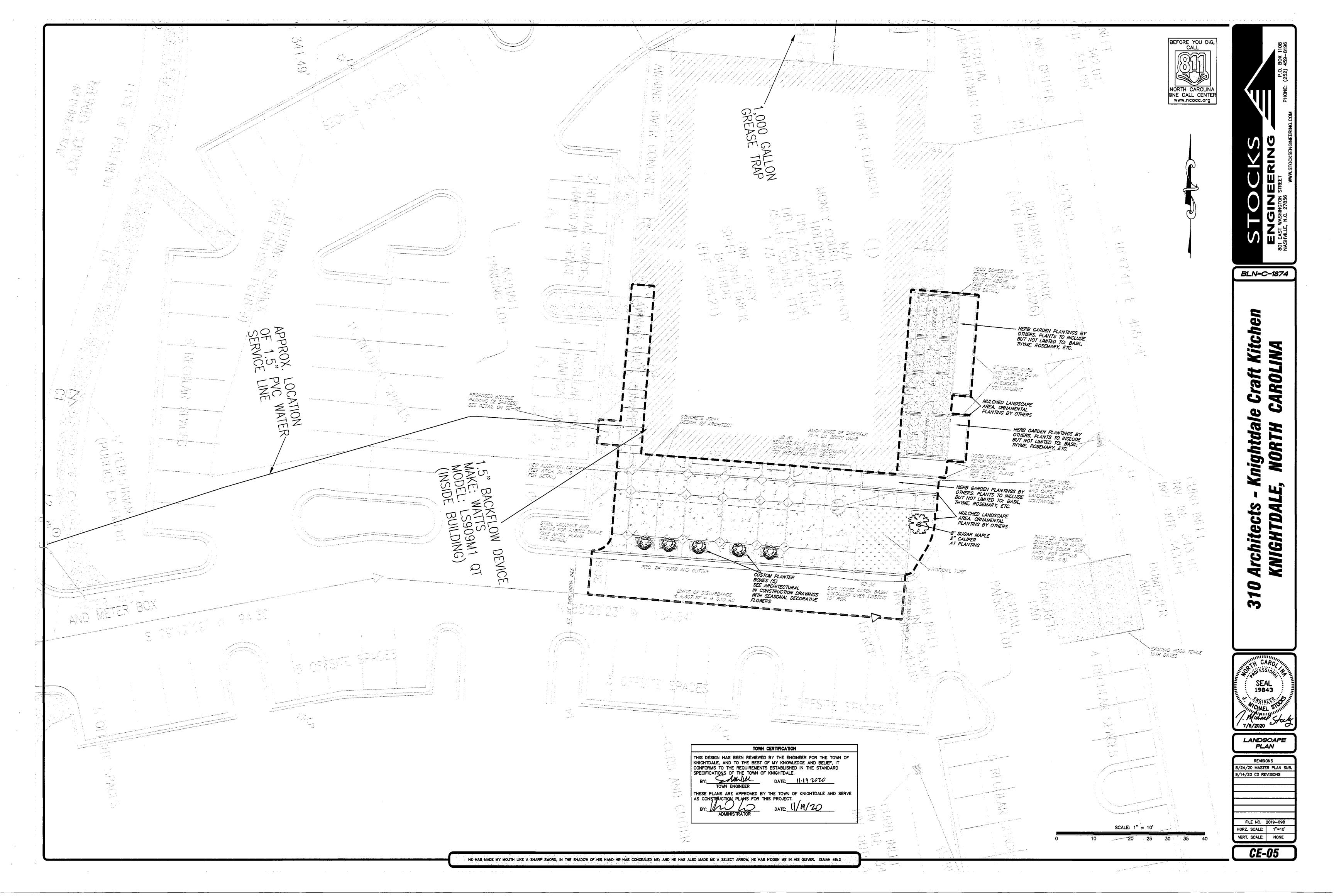
VERT. SCALE: NONE **CE-02**





CAROLINA ORTH

1/24/20 MASTER PLAN SUB.

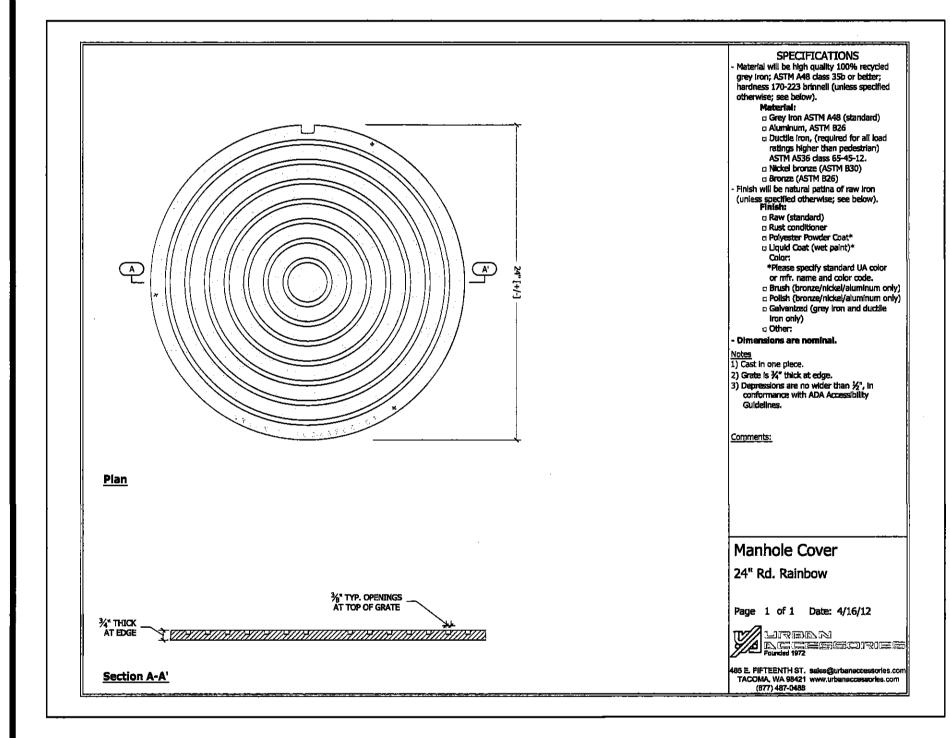


- 1. All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition)
- 2. Utility separation requirements: a) A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to waterline specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well
- b) When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director.
- All distances are measured from outside diameter to outside diameter c) Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10'on each side of
- crossing must be specified & installed to waterline specifications d) 5.0'minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
- e) Maintain 18° min. vertical separation at all watermain & RCP storm drain crossings; maintain 24° min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradie having 6° min. ciearance (per CORPUD details W-41 & S-49)
- f) All other underground utilities shall cross water & sewer facilities with 18°min. vertical
- Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction

 4. Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities Department

 5. 3.0 immimum cover is required on all water mains & sewer forcemains. 4.0 iminimum cover is
- required on all reuse mains
 6. It is the developer's responsibility to abandon or remove existing water & sewer services not being
- It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal of service from ROW or easement per CORPUD Handbook procedure
 Install 2" water services with meters located at ROW or within a 2'x2' Waterline Easement immediately adjacent. NOTE: It is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure
 Install 4" PVC sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum
- Pressure reducing valves are required on all water services exceeding 80 psi; backwater valves are required on all sanitary sewer services having building drains lower than 1.0' above the next
- 10. All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to
- 11. NCDOT / Rallroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction
- 12. Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the CORPUD FOG Program Coordinator prior to issuance of a Building Permit.

 Contact Tim Beasley at (919) 996–2334 or timothy.beasley@raleighnc.gov for more information 13. Cross-connection control protection devices are required based on degree of health hazard
- involved as listed in Appendix—B of the Rules Governing Public Water Systems in North Carolina These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approva The devices shall be installed and tested (both Initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent. Contact Joanie Hartley at (919) 996-5923 or joanie.hartley@raieighnc.gov for more information



TOWN CERTIFICATION THIS DESIGN HAS BEEN REVIEWED BY THE ENGINEER FOR THE TOWN OF KNIGHTDALE, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT CONFORMS TO THE REQUIREMENTS ESTABLISHED IN THE STANDARD SPECIFICATIONS OF THE TOWN OF KNIGHTDALE. SALALL DATE: 11.19.2020 THESE PLANS ARE APPROVED BY THE TOWN OF KNIGHTDALE AND SERVE AS CONSTRUCTION PLANS FOR THIS PROJECT. DATE: 1/19/20

Concrete and Asphalt Testing

Portland Cement Concrete Testing Requirements
Initial Test: The initial test (from first ready—mix truck) is to be taken after the second cubic yard is dispensed from the mixer and is to consist of the following: One slump test

Three cylinders pulled, prepared and stored on-site for 24 hours Subsequent Tests: After the above tests are pulled from the Initial truck, every 5th truck thereafter is to be tested in the same manner as noted above.

Asphalt Concrete Testing Requirements Compaction: Testing for asphalt density is to follow NCDOT "Standard Specifications for Roads and Structures", Section 609-9, "Field Compaction Quality Management," latest revision.

Thickness: The minimum frequency of coring for thickness testing shall be on the basis of test sections consisting of not more than 1500 linear feet of lay down width, exclusive of intersections and irregular areas. The test sample is to be a 6-inch cored sample. The sample is to be numbered and logged for

Contractor's Quality Control System: Follow NCDOT "Standard Specifications for Roads and Structures" Section 609—5, "Contractor's Quality Control System," latest revision.

Mixture and Job Mix Formula Adjustments: Follow NCDOT "Standard Specifications for Roads and Structures",

Section 609-4. "Field Verification of Mixture and Job Mix Formula Adjustments", latest revision. General: All other applicable sections of Section 609 of the NCDOT "Standard Specifications for Roads and Structures" shall apply relating to Quality Control Plan, mix design, control limits, corrective action, equipment and measurement.

Testing Cost: Site Contractor is responsible for cost of testing.

Concrete Notes

1. All construction, placing, pouring and curing concrete is to conform to the latest edition of ACI 318.

2. All reinforcing steel is to be cold cut and bent in conformance with the latest edition of ACI 318 and

- 3. Portland Cement Concrete shall have a minimum 28-day compressive strength of 4,000 PSI (or noted), a non-vibrated slump between 2.5 and 4-inches, a minimum cement content of 545 pounds per cubic yard, an air entrainment of 5-7-percent and a maximum water-cement ratio of 0.545 in accordance with Class B concrete as described in the NCDOT Standard Specifications for Roads and Structures unless otherwise
- 4. Do not use chloride in any concrete which has reinforcing steel or wire fabric. 5. Reinforcing steel shall meet ASTM A—615, Grade 60. Welded wire fabric shall meet ASTM A—185. Tie wire shall conform to ASTM A-82.
- 6. Lap welded wire fabric a minimum of one mesh. Lap all bars a minimum of 24 inch. Alternate adjacent bar splices a minimum of 48". Use only approved chairs with sand plates to support reinforcing on grade.
 All crossings of reinforcement are to be tied. Supports for reinforcing to hold bars against movement during pour and finish operation. Supports for reinforcing bars to be a minimum of 48 inches apart.
 Concrete shall be only plant—mixed, transit—mixed or ready—mixed concrete. The time elapsing from
- mixing to placing the concrete shall not exceed ninety (90) minutes.
- 10. Concrete shall not be deposited on frozen subgrade and shall not be poured when the air temperature for the succeeding 24—hour period is less than 32 degrees F.

 11. All concrete when placed in forms shall have a temperature between 50 degrees F and 90 degrees F and shall be maintained at a temperature of not less than 50 degrees for at least 72 hours for normal concrete and 24 hours for high early strength concrete.
- 12. Do not place fresh concrete during summer on a dry subgrade. Moisten subgrade before placing concrete. 13. Subgrade is to be firm, free of water and/or silt and undisturbed or compacted properly. Consult Engineer if soft or yielding subgrade is encountered for improvement directions. If ground water is entering subgrade, consult Engineer for instructions.
- 14. Areas of concrete to be removed shall be saw cut before removing. The saw cut shall provide a smooth, straight edge approximately two (2) inches deep before breaking away the adjacent concrete.

 15. Immediately after the forms have been removed and all honeycombed areas are repaired, backfill to
- prevent underwash.

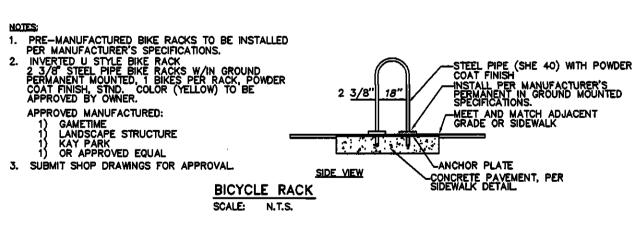
 16. Brooming of the concrete surface shall be done transverse to the direction of traffic for all pedestria
- 17. Joint spacing shall be no less than 8-feet. Where existing sidewalks are being widened, transverse joints shall be located so as to line up with existing joints in the adjacent existing sidewalk. Grooved joints shall
- 18. Concrete Sub shall be responsible for all score joints and expansion joints. A preliminary score joint pattern and expansion joint pattern shall be submitted to the project engineer for review prior to pouring
- 19. Expansion joints shall be one—half (1/2) inch in width and shall be placed between all rigid objects at a
- distance of no more than thirty (30) feet apart and shall extend the full depth of the concrete with the top of the filler one-half (1/2) inch below the finished surface.
- 20. The edges of the curb/sidewalk shall be finished with an approved edging tool one-half (1/2) inch radius. Joints shall be similarly finished immediately after templates have been removed.
 21. Saw control joints as soon as fresh concrete will retain coarse aggregate against the sawing action. 22. Contractor SHALL NOT POUR any concrete before forms are inspected by the project engineer and/or the owner. Any concrete that has not been approved by the engineer and/or owner will be the responsibility of the contractor.

Drainage Notes

1. Boxes may be reinforced masonry, masonry, precast concrete or cast-in-place reinforced concrete. 2. The maximum height of an un-reinforced masonry drainage structure with 8" walls shall be limited to 8' -0" from invert of the outlet pipe to the top of the casting. Depths greater than 8' - 0" shall have walls 12" thick. Basins over 12' in total depth shall be designed by a NC Professional Engineer. 4? walls are not allowed on drainage structures. Steps are to be provided on all basins deeper than 42".
 Steps are to be PS1—PF as manufactured by M. A. Industries or an approved equal. Locate on non—pipe

5. Mortar in masonry boxes is to be type M. i. Clay brick structures are not allowed.

- Concrete pipe is to be minimum Class III reinforced concrete meeting ASTM C-76, latest revision. Concrete building brick is to meet ASTM C-55, Grade N, Type 1. I. All iron castings are to be drilled and lagged to the drainage structure. The drainage structure as well is 10. All cast-in-place or precast concrete drainage structures located in paved areas accessible to truck
- oadings to be designed to meet AASHTO HS 20-44 loading. See manufacturers details for wall, top and 11. All frames, grates, and hoods to receive a bituminous coating.



Site Contractor to inform General Contractor to verify finished grade at building before digging footings.
 Some portions of the building foundation wall may, of necessity, need to retain building pad fill to allow exterior grades to be dropped. In this case, step footings may be necessary to achieve the desired grade

- 2. New finished contours shown are top of future paving in areas to receive pavement and top of topsoil 3. Areas outside of the parking lot perimeters shown to be seeded shall receive 4 inches of topsoil. This
- topsoil to be placed and leveled by the Contractor.
- 4. Dimensions on buildings are for grading purposes only and are not to be used to lay-off footings. See
- 5. Contractor shall notify and cooperate with all utility companies or firms having facilities on or adjacent to the site before disturbing, altering, removing, relocating, adjusting or connecting to said facilities. Contractor shall raise or lower tops of existing manholes, as required, to match finished grades. 6. All catch basin grate and frames are to be Vulcan or approved equal. Verify that dimension heights on
- castings are not exceeded in critical areas before ordering substitute castings.

 All areas not covered by an impervious surface or landscaped planting beds are to be grassed. . Unusable excavated materials and all waste resulting from clearing and grubbing shall be disposed of
- off—site by Contractor. 3. All excavation is unclassified and shall include all materials encountered. Before any machine work is done, Contractor shall stake out and mark the items established by the Site Pian. Control points shall be preserved at all times during the course of the project. Lack of proper working points and grade stakes may require cessation of operations until such points and grades have been placed to the Owner's satisfaction.

Parking, Roadway and Building Subgrade Preparation

- 1. Subgrade on Precompacted Original Soil a. Remove all the topsoil and all questionable organic soil and extend a minimum of four (4) feet beyond the outside edge of the pavement. Stockpile all topsoil that is free from trash and debris for re—use.
- b. Precompact the exposed grade with a vibratory roller weighing a minimum of ten (10) tons (static load) or equal to stabilize the initial settlement of the top strata of the soil. The stability of the subgrade will be considered adequate when the total settlement after the last four (4) complete passes by the vibratory roller does not exceed 1/8". Any area that settles excessively and fails to stabilize under continued rolling should be further undercut and replaced with properly compacted select granular fill.

2. Subgrade on Certified Compacted Fill

- a. Prepare the site following the same procedures as outlined in Items 1 and 2 above. b. Using the same compaction equipment as outlined above, compact new fill soil in $\pm/-8$ -inch layers to a minimum 98—percent of the maximum dry density at its optimum moisture content in accordance with the Standard Proctor Method, ASTM Standard D 698—78 and field controlled in accordance with ASTM Standard D 2167—84, or equal. The top one (1) foot of the prepared fill subgrade should be compacted to 100—percent of the maximum dry density using the Standard Proctor Method.
- c. The end of the fill should be terminated at the minimum slope of two (2) horizontal to one (1) vertical measured from three (3) feet beyond the outside edge of the pavement to the toe of the fill. The fill soil is to be select granular soil weighing a minimum of 110 pcf at its optimum moisture content.

Site Plan Notes

- 1. Contractor to provide full water service to site including meter, setting, and connection fees in his
- 2. The Site Contractor is to assume responsibility for all water and sewer utilities from a point 5' outside of the building to the point of public connection.
- . Contractor to furnish all paint striping. . Owner to purchase or lease dumpsters & recycle bins. These will not be provided by Town. A Geotechnical Investigation was prepared for this project. Contractor is responsible for digging site, if desired prior to bid. Contact Engineer at 252.459.8196 at least 48 hours prior to want to gain
- 5. All site plumbing is to meet the NC State Building Code, Volume II, Plumbing. 7. Water service lines to be HDPE 1 1/4 inch w/1 inch meter and backflow preventor
- B. Sewer services to be PVC, service weight. Minimum grades for 4—inch lines to be 2.08-percent.
- 9. Pressure reducing valve, if needed, to be located in building and is not Site Contractor's responsibility 10. Provide handicap signs, markings and ramp per the details.
- 11. All signs, pavement markings, and other traffic control devices are the Site Contractor's responsibility and shall conform to: Manual on Uniform Traffic Control Devices, current edition, as amended; ADA guidelines; and, ANSI A117.1.
- 12. All dimensions are to face of curb unless indicated otherwise. Staking plan coordinates are to back
- 13. Contractor shall coordinate installation of all signs, pavement markings, and other traffic control devices with other Contractors on the site.

 14. Contractor shall saw—cut to provide smooth transition at tie—in to existing edge of pavement when
- applicable.

 15. Do not pour any concrete before forms are inspected and approved by Engineer/Owner.

 16. Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Contractor shall be prevented by the Contractor shall be pre
- Construction" issued by AGC of America, Inc., and the Safety and Health Regulations for Construction issued by the U.S. Department of Labor.

 17. Storm drainage pipe is to be Class III reinforced concrete meeting ASTM C-76, latest revision.
- 18. All handicap ramps are to meet "ADA Accessibility Guidelines for Buildings and Facilities" as detailed in Federal Register, Vol. 56, No. 144, dated July 26, 1991, rules and regulations activated January 26 1992, latest revision. Also, refer to North Carolina State Bullding Code Volume 1—C, "Making Buildir and Facilities Accessible To and Useable by the Physically Handicapped", 1991, latest edition and ANS A117.1, current edition, as amended.

General Notes:

- This plan must be approved by the Town of KNIGHTDALE prior to construction of any street, water, storm drainage or other site improvements on this plan.
 All improvements shall conform to the Town of KNIGHTDALE Standards and Specifications or NCDOT, as applicable.
 Disturbed area is greater than 1 acre and formal Sedimentation & Erosion Control plan approval is required as a condition of construction plan approval. Measures shown on the approved Erosion & Sedimentation Control Plan should be regarded as minimum requirements; additional measures shall be put in place as needed to insure that no sediment is released from the site.
- from the site.
 4. The General Contractor is responsible for installing and maintaining all measures necessary to ensure that all sediment is contained on-site.

- Omitted.
 Stormwater detention and nutrient management does not apply.
 Water and sewer service fees are due on this site prior to setting of taps or meters. Contact Town of KNIGHTDALE for payment information.
 Contractor shall make arrangements with the local utility authority for connection to existing mains. Do NOT operate any existing valves without permission of the Town of KNIGHTDALE.
 Water meters supplied by contractors shall contain encoder register and module for radio transmitted meter reading per Town of KNIGHTDALE Standard.
 For the installation of electrical services, location of pad-mounted transformer if needed and to coordinate electrical temporary service, contact Public Utilities at Town of KNIGHTDALE.
 Any relocation of existing utilities will be at the cost of the General Contractor. The Town will not accept responsibility for damages to curb and gutter or street improvements if installed prior to underground services, nor will the Town absorb the cost for payement patching, damages to landscaping or borings to Install underground services.
- Install underground services.

 12. Contractor shall be responsible for all work zone traffic control in or adjacent to ROW. All
- signs, pavement markings and other traffic control devices shall conform to the Manual on Uniform Traffic Control Devices (MUTCD), latest edition as amended. 13. Fire Protection water supply system including fire hydrants, shall be installed and in service prior to recording the subdivision, or, if no subdivision is involved, shall be installed prior to the placing of combustible building materials for structures or combustible pre-tested fabricated building assemblies on the project site or utilizing them in the construction of building structures. If phased coordination is planned, coordinate installation of the fire protection water system is permitted.

 14. Fire department vehicular access to all structures under construction shall be provided at all times.
- In areas where ground surfaces are soft or likely to become soft, hard all weather surface roads shall be
- provided and maintained.

 15. Every street will utilize a complete Street Name consisting of a Base Name and Type Suffix (e.g., Main Street).

 Assigned Address must be issued via Downing and Associates, Inc. ADDRESSING CERTIFICATE completed by the Town of KNIGHTDALE Planning Dept. Addressing Agent and will be verified through the Town of KNIGHTDALE 9-1-1

 Coordinators Office. General Contractor to coordinate.

 16. Commercial property Address Numbers shall be a minimum of ten (10) inches in height with a minimum stroke width of one (1) inch. These numbers shall contrast with their background and shall be

- minimum stroke width of one (1) inch. These numbers shall contrast with their background and shall be Arabic style numerals.

 17. Address Numbers must be posted on the front of the structure nearest to the main entrance in a position to be pialnly legible, visible and unobstructed from the street or road fronting the property.

 18. Any change or deviation from this plat, prior to or during construction, will cause addressing and/or street names to be re-evaluated with possible subsequent change.

 19. Plans are based on an actual field survey performed by Downing and Associates, inc.
 Reference horizontal datum is NAD 83, reference vertical datum is NAVD 88.

 20. Contractor to verify all building dimensions and/or location(s) with architectural drawings before beginning construction. If discrepancies are found, cease construction and consult the architect and civil site engineer for resolution.
- 22. All HVAC equipment shall be screened from the view of all public street rights—of—way for their entire length along those streets, except for necessary access. 23. For the installation of gas services, contact Public Utilities
- 23. For the installation of gas services, contact Public Utilities.
 24. The customer is required to provide an outside lockable disconnect.
 25. Right-of-Way Easement must be signed prior to installation of utilities.
 26. Call NC One Call Center at (800) 632-4949 before digging to locate existing utilities.
 27. If overhead primary electric lines are present, mature tree height shall not exceed 15 feet.
 28. Copies of all permits and approved plans must be kept on site in a permit box that is conspicuously located and easily accessible during construction. This includes approved construction plans, approved erosion control plans, encroachment agreements, driveway permits, water/sewer permits, etc.
 29. Plan approval is valid for two (2) years from approved date.

Sewer Notes

- 1. No Sewer line installation shall take place until an approved Site Plan has been issued.
- Sewer Pipe:
 a. SDR-35 SMOOTHWALL: Pipe shall conform to ASTM D-3034 Type PSM, SDR-35.
- Pipe bedding shall be Class B modified (i.e. stone to top of pipe).
 Any well pointing, dewatering, etc. needed during sewer construction is to be included in the cost of the line laid. Utilize select fill from on—site for trench borrow when needed. If material of a select
- nature is not available, bring in from off-site.
- 5. The minimum clearances for water, sewer and storm drainage lines shall be as follows:
- Horizontal 10' Water and Sewe 18" w/water above sewer
- Water and StormDrainage 12" w/water above 24" w/storm drainage
- Sewer and Storm Drainage 6. The Contractor shall make arrangements with the local utility authority when connecting to existing
- 7. Location, size and invert elevations of clean outs shown on "private" services are to be coordinated
- with the approved Plumbing Plans for the building. All plumbing is to meet the requirements of the NC State Building Code, Volume II, Plumbing, latest revision.

 8. Contractor shall seed, mulch and tack all disturbed areas within 7 days after backfilling trench. All sedimentation control measures shall be kept in operable condition until a stand of grass is established
- and the area is capable of resisting erosion by wind and rain. All erosion control measures shall be removed when authorized by the Engineer after the completion of the project.

 9. All excavated wood and rocks shall be disposed of offsite by the Contractor. Bury will not be permitted onsite.

 Contractor shall take proper precautions not to disturb existing property comer markers. All
- disturbed property corner markers shall be replaced by a Registered Land Surveyor.

 11. All cost for the provision of erosion control rip rap, jute meshing, matting, grass seeding and silt fence shall be included in total base bid.
- 12. Manholes or Wetwells qualify as "confined" and require compliance with OSHA "Confined Access Entry" requirements. Certified equipment, proper notification and other applicable equipment and or devices may be necessary to protect workers, after system is operational, from hydrogen—sulfide gas
- build-up or an otherwise oxygen-less environment.

 13. The contractor shall provide to Engineer, upon completion of water and sewer construction, record drawings of the sewer installation specifically showing/depicting any deviations from the permitted plans. Plans are to be marked surveyed and submitted to Engineer. The final payment request will not be submitted to the owner nor will a "certificate of substantial completion" be issued until these "surveyed
- plans" have been completed and received by the Engineer.

 14. Utility contractor is responsible for notifying local authority of time and date he plans to commence
- 15. Where lines cross gravel/asphalt driveways, Contractor is to restore driveways to the original condition. Drives shall be repaired within 7-days of open cut. 16. All Sanitary Sewer shall be in accordance to Town of KNIGHTDALE Standards and Specifications.
- 17. All Frames and Lids to receive a bituminous coating

- 1. No existing valves and fire hydrants shall be operated without the explicit permission from the Public Utility Owner. The contractor shall make arrangements with the local utility authority prior to connecting
- to existing mains.
 2. Contractor shall seed, mulch, and tack all disturbed area within 7 days after backfilling trench. All sedimentation control measures shall be kept in operable condition until a stand of control measures shall be removed when authorized by the Engineer after the completion of the project.

 3. All excavated wood and rocks shall be disposed off—site by the Contractor. Bury will not be
- permitted on—site.

 4. Water line crossing existing asphalt pavement shall be installed by the Open Cut method.
- Where lines cross gravel/asphalt driveways, Contractor is to restore driveways to the original condition. Drives shall be repaired within 7-days of open cut.
- 6. Contractor shall take proper precautions not to disturb existing property corner markers. All disturbed property corner markers shall be replaced by a Registered Land Surveyor.

 7. All cost for the provision of erosion control rip rap, jute meshing, matting, grass seeding and silt
- fence shall be included in the total base bid. 8. Utility contractor is responsible for notifying local authority of time and date he plans to commence
- 9. Any well pointing, dewatering, etc. needed during construction shall be the responsibility of the contractor. Trench borrow needed during construction shall be included in the cost of the line laid, unless otherwise specified.

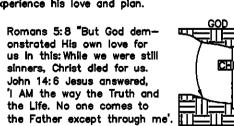
 2. Valve box to be 3 piece telescopic with concrete collar when not in pavement.
- The contractor shall provide all the material and appurtenances necessary for the complete installation of the utilities. All pipe and fittings shall be inspected prior to being covered.
- 12. Lines shall be flushed thoroughly to remove all dirt and debris. Chlorine shall be applied to all water lines in sufficient concentration to leave an overall residual of 50 ppm. The chlorinated water shall remain in the lines for 24 hours at the end of which time the chlorine residual shall be at least 10 ppm. The lines shall then be flushed until there is normal chlorine residual present and samples shall be collected for bacteriological analysis.

 13. The contractor to conduct bacteriological testing of water lines, which have successfully passed hydrostatic testing and have been disinfected in conformance with AWWA Standards. This procedure
- requires (5) days to complete. 14. No contractors are authorized to use un-metered water during construction. All pipe and appurtenances shall be thoroughly cleaned prior to placement. Pipe shall be laid with straight lines and
- even grades and all joints snall be perfectly titted. During periods when pipe is not being idia, ope
- ends shall be securely blocked.

 15. All excavation is unclassified and shall include all materials encountered.

 16. All concrete used for blocking and concrete collars is to be minimum 3,000 psi at 28 days, air
- 17. Contractor shall saw-cut to provide smooth transitions where existing asphalt is to be removed.

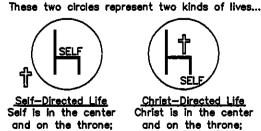
- Gospel Notes The following notes do not represent the belief of any municipality, government organization, or client of Stocks Engineering. The detail is included to show the foundation of Stocks Engineering and its employees. Our prayer is that through the truth outlined below you will clearly see what it means to have a
- God loves you and he created you to know him personally. He has a wonderful plan for you life. John 3:16 "For God so loved the world that he gave his only son, that whoever believes in him shall not perish but have eternal life."
- What prevents us from knowing God personally? 2. OUR CONDITION
- People are sinful and separated from God, therefore we cannot know him personally and experience his love and plan.
 - Romans 3:23 "For all have sinned and fall short of the glory of God." Romans 6:23 For the wages of sin is death" (Spiritual separation from God)
 - This diagram illustrates that God is Holy and people are sinful. A great gulf separates the two. The arrows illustrate people continually trying to reach God through our own efforts, but we inevitably fail
- There is only one way to bridge this gulf...
- 3. GODS RESPONSE Jesus Christ is God's only provision for sin, Through him alone we can know God personally and experience his love and plan.



This diagram ilustrates that God has bridged the gulf that separates us from Him by sending His son, Jesus Christ, to die on the cross in our place to pay the penalty for our sins.

It is not enough just to know these truths... 4. OUR RESPONSE We must individually receive Jesus Christ as Savior and Lord; only then can we know God personally and experience His love and Plan.

Ephesians 2:8-9 "For it is by grace you have been saved, through faith — and this is not from yourselves, it is the gift of God - not by works, so no one can John 1:12 "Yet to all who received Him, to those who





He gave the right to become children of God." Which circle best represents your life? Which circle would you like to have represent your life?

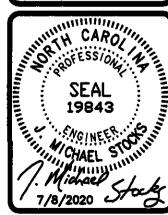
- You can receive Christ right now by faith in prayer.

 "Lord Jesus, I need you. Thank you for dying on the cross for my sins. I open the door to my life and receive You as my Savior and Lord. Thank you for forgiving my sins and giving me eternal life. Take control of the throne of my life. Make me the kind of person You want me to be." If this prayer expresses the desire of your heart, then you can pray this prayer and Christ will come into
- For more information on what it means to have a relationship with God, or if you have any questions or prayer request please submit them to stocksengineering@gmail.com, call us at 252.459.8196, or visit our web site, www.stocksengineering.com



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SITE NOTES AND DETAILS

REVISIONS

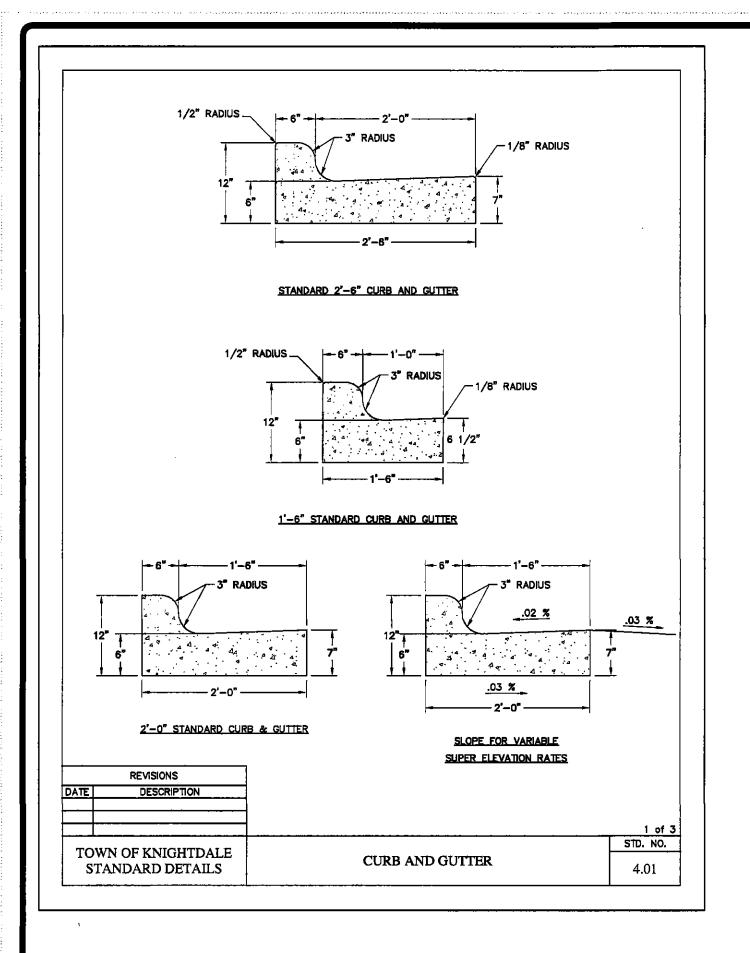
3/24/20 MASTER PLAN SUB

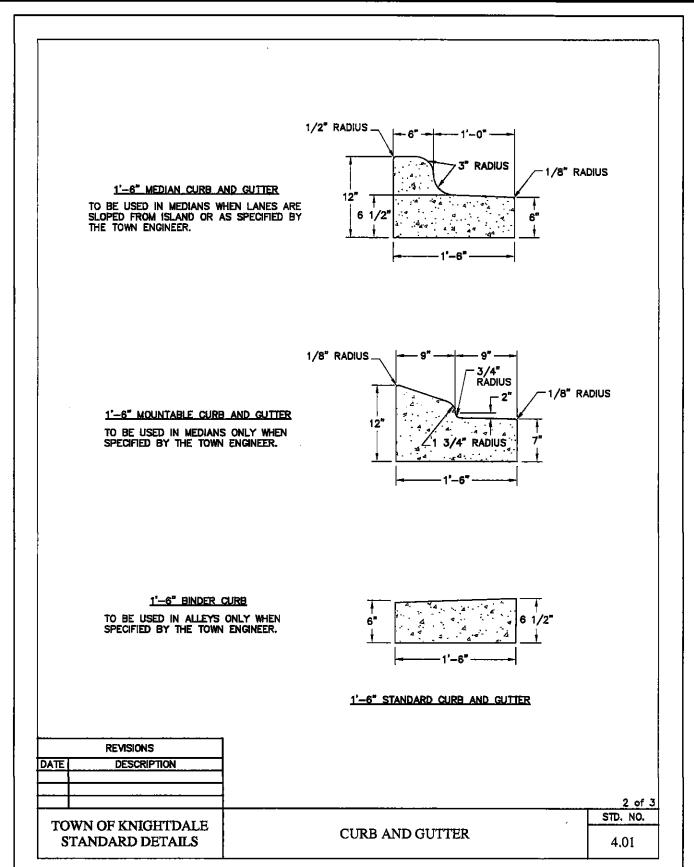
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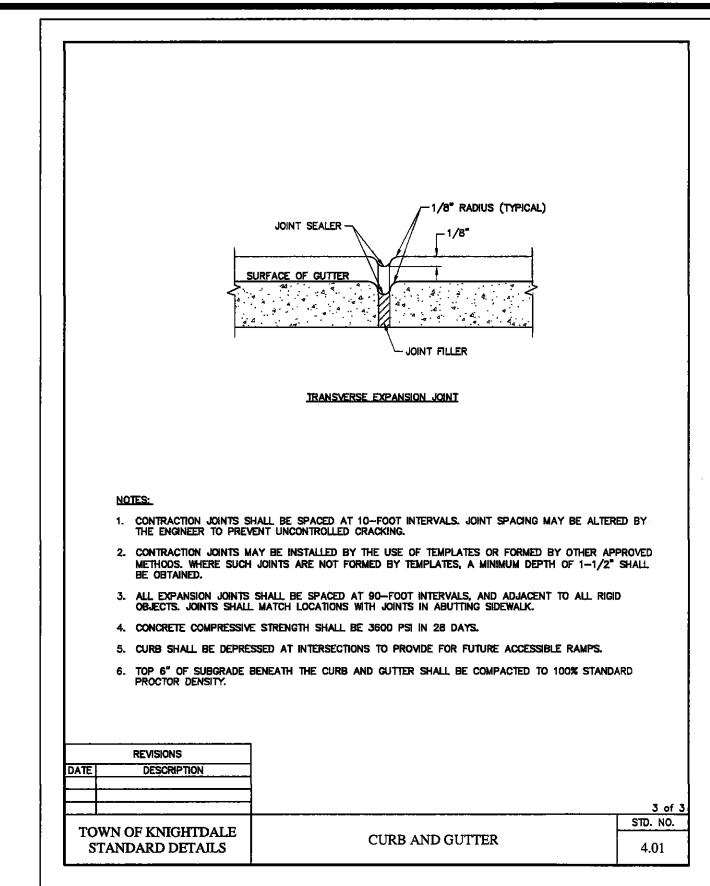
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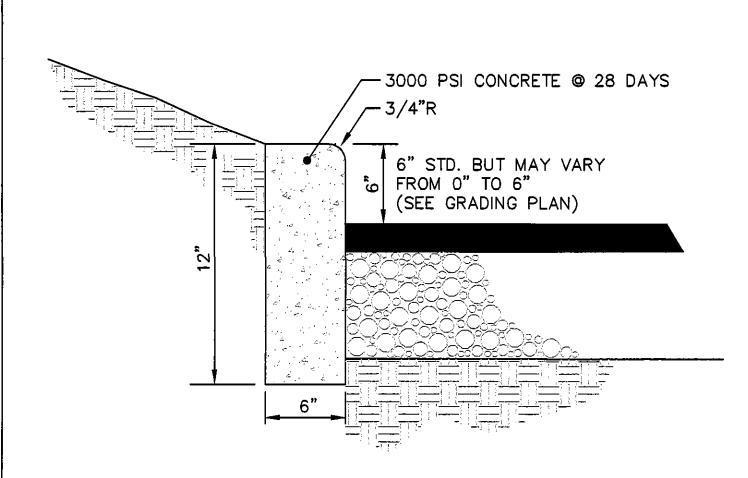
HORZ. SCALE: AS NOTED NONE VERT. SCALE:

LET ME GET YOU SOMETHING TO EAT, SO YOU CAN BE REFRESHED AND THEN GO ON YOUR WAY GENESIS 18:5

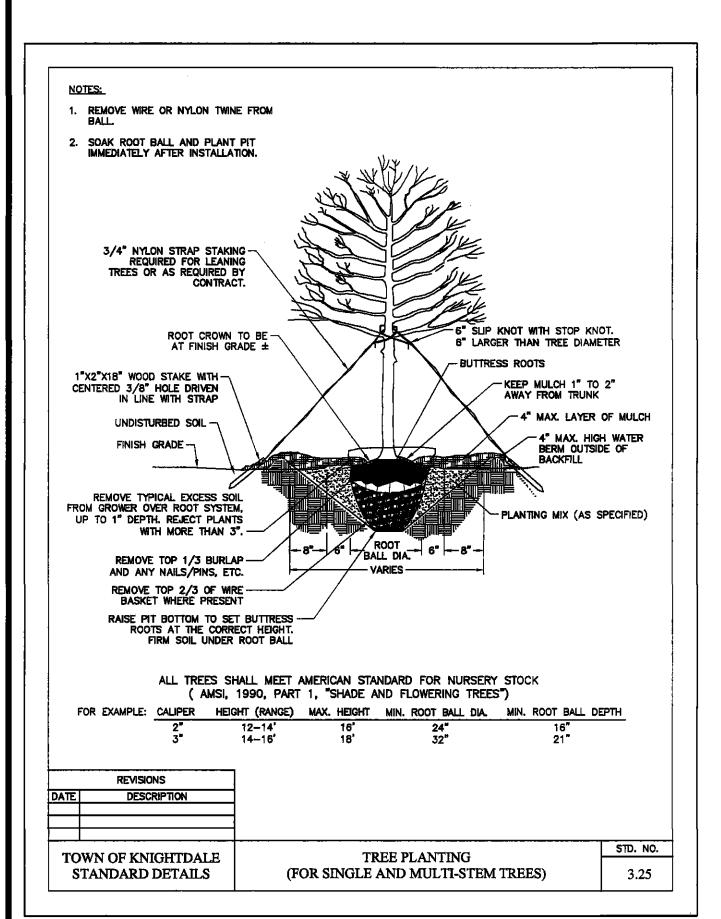








HEADER CURB



TOWN CERTIFICATION

DATE: 11-19-2020

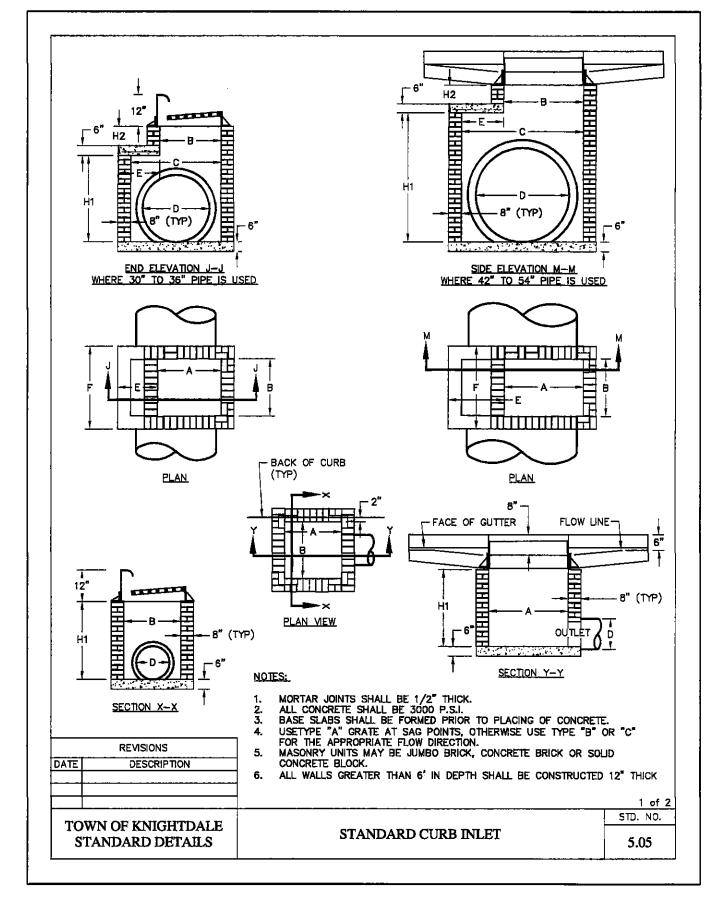
THIS DESIGN HAS BEEN REVIEWED BY THE ENGINEER FOR THE TOWN OF KNIGHTDALE. AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT

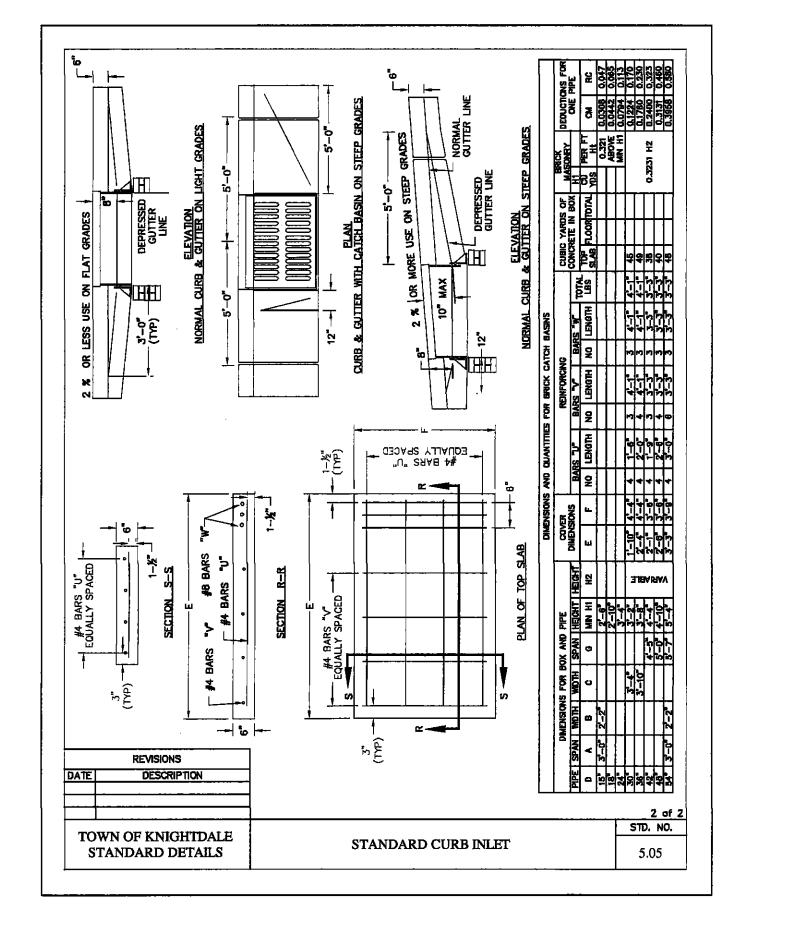
THESE PLANS ARE APPROVED BY THE TOWN OF KNIGHTDALE AND SERVE

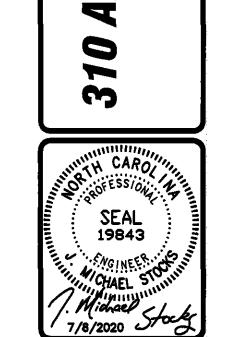
CONFORMS TO THE REQUIREMENTS ESTABLISHED IN THE STANDARD

SPECIFICATIONS OF THE TOWN OF KNIGHTDALE.

AS CONSTRUCTION PLANS FOR THIS PROJECT.







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SITE NOTES

AND DETAILS

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LET ME GET YOU SOMETHING TO EAT, SO YOU CAN BE REFRESHED AND THEN GO ON YOUR WAY...... GENESIS 18:5

FILE NO. 2019-098 HORZ. SCALE: AS NOTED

VERT. SCALE: NONE

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend o holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un attended days (and this will determine if a site inspection in needed). Days on which no rainfall occurred shall be recorded a "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	 Identification of the measures inspected, Date and time of the inspection, Name of the person performing the inspection, Indication of whether the measures were operating properly, Description of maintenance needs for the measure, Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	 Identification of the discharge outfalls inspected, Date and time of the inspection, Name of the person performing the inspection, Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, Indication of visible sediment leaving the site, Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	 If visible sedimentation is found outside site limits, then a record of the following shall be made: Actions taken to clean up or stabilize the sediment that has left the site limits, Description, evidence, and date of corrective actions taken, and An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event \geq 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	 The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
- (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
- (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

TOWN CERTIFICATION

THIS DESIGN HAS BEEN REVIEWED BY THE ENGINEER FOR THE TOWN OF KNIGHTDALE, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT CONFORMS TO THE REQUIREMENTS ESTABLISHED IN THE STANDARD SPECIFICATIONS OF THE TOWN OF KNIGHTDALE.

BY: DATE: 11-19-7070

TOWN ENGINEER

THESE PLANS ARE APPROVED BY THE TOWN OF KNIGHTDALE AND SERVE AS CONSTRUCTION PLANS FOR THIS PROJECT.

BY: ADMINISTRATOR

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

-) Visible sediment deposition in a stream or wetland.
- (b) Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- (c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- (d) Anticipated bypasses and unanticipated bypasses.
- (e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800)

	•	beparement's Environmental Enlergency Center personner at (or
	Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
	(a) Visible sediment	Within 24 hours, an oral or electronic notification.
	deposition in a	Within 7 calendar days, a report that contains a description of the
	stream or wetland	sediment and actions taken to address the cause of the deposition.
		Division staff may waive the requirement for a written report on a
		case-by-case basis.
		 If the stream is named on the <u>NC 303(d) list</u> as impaired for sediment-
		related causes, the permittee may be required to perform additional
		monitoring, inspections or apply more stringent practices if staff
		determine that additional requirements are needed to assure compliance
		with the federal or state impaired-waters conditions.
	(b) Oil spills and	Within 24 hours, an oral or electronic notification. The notification
	release of	shall include information about the date, time, nature, volume and
	hazardous	location of the spill or release.
	substances per Item	
	1(b)-(c) above	
	(c) Anticipated	A report at least ten days before the date of the bypass, if possible.
	bypasses [40 CFR	The report shall include an evaluation of the anticipated quality and
]	122.41(m)(3)]	effect of the bypass.
	(d) Unanticipated	Within 24 hours, an oral or electronic notification.
	bypasses [40 CFR	Within 7 calendar days, a report that includes an evaluation of the
	122.41(m)(3)]	quality and effect of the bypass.
	(e) Noncompliance	Within 24 hours, an oral or electronic notification.
	with the conditions	Within 7 calendar days, a report that contains a description of the
	of this permit that	noncompliance, and its causes; the period of noncompliance,
	may endanger	including exact dates and times, and if the noncompliance has not
	health or the	been corrected, the anticipated time noncompliance is expected to
	environment[40	continue; and steps taken or planned to reduce, eliminate, and
	CFR 122.41(I)(7)]	prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).
		Division staff may waive the requirement for a written report on a
		case-by-case basis.
I I		

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19



GINEERING
ASHINGTON STREET
N.C. 27856

BLN=C-1874

MARCHITECTS- KNIGHTDALE CRAFT KII



NCG01 DETAILS

REVISIONS

FILE NO. 2019-098
HORZ. SCALE: 1"=50"

VERT. SCALE: NONE

D-03

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes								
Si	te Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations					
(a)	Perimeter dikes, swales, ditches, and perimeter slopes	7	None					
(b)	High Quality Water (HQW) Zones	7 None						
(c)	Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed					
(d)	Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed					
(e)	Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope					

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Ì	Temporary	Stabilization	
1	i cilihoral A	Stabilization	-

- Temporary grass seed covered with straw or other mulches and tackifiers
- Hydroseeding
- Rolled erosion control products with or without temporary grass seed
- Appropriately applied straw or other mulch
- Plastic sheeting

Permanent Stabilization

- Permanent grass seed covered with straw or other mulches and tackifiers
- Geotextile fabrics such as permanent soil reinforcement matting
- Hydroseeding
- Shrubs or other permanent plantings covered with mulch
- Uniform and evenly distributed ground cover sufficient to restrain erosion
- Structural methods such as concrete, asphalt or retaining walls
- Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- 1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- 2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- 3. Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- 4. Provide ponding area for containment of treated Stormwater before discharging offsite.
- 5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- 1. Maintain vehicles and equipment to prevent discharge of fluids.
- 2. Provide drip pans under any stored equipment.
- 3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- 4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- 5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- 6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER. BUILDING MATERIAL AND LAND CLEARING WASTE

- 1. Never bury or burn waste. Place litter and debris in approved waste containers.
- 2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- 3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- 4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- 5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- 6. Anchor all lightweight items in waste containers during times of high winds.
- 7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- 8. Dispose waste off-site at an approved disposal facility.
- 9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

- 1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- 2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- 3. Contain liquid wastes in a controlled area.
- 4. Containment must be labeled, sized and placed appropriately for the needs of site.
- 5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- 2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- 3. Monitor portable toilets for leaking and properly dispose of any leaked material.

 Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- 1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- 2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- 3. Provide stable stone access point when feasible.
- I. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

TOWN CERTIFICATION

THIS DESIGN HAS BEEN REVIEWED BY THE ENGINEER FOR THE TO KNIGHTDALE, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, CONFORMS TO THE REQUIREMENTS ESTABLISHED IN THE STANDAR SPECIFICATIONS OF THE TOWN OF KNIGHTDALE.

BY: SALM DATE: 11-19-2020
TOWN ENGINEER

TOWN ENGINEER

THESE PLANS ARE APPROVED BY THE TOWN OF KNIGHTDALE AND SE AS CONSTITUTION PLANS FOR THIS PROJECT.

BY: DATE: 11/19/

CONCRETE WASHOUTS

- 1. Do not discharge concrete or cement slurry from the site.
- 2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- 3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- 4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- 5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- 6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- 7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- 8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- 9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- 10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- 1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- 2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- 3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- 4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- 1. Create designated hazardous waste collection areas on-site.
- 2. Place hazardous waste containers under cover or in secondary containment.
- . Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

INEERING
NGTON STREET
27856

EAST WASHING. N.C.

BLN=C-1874

RCHITECTS- KNIGHTDALE CRAFT KITC. KNIGHTDALF NORTH CAROLINA



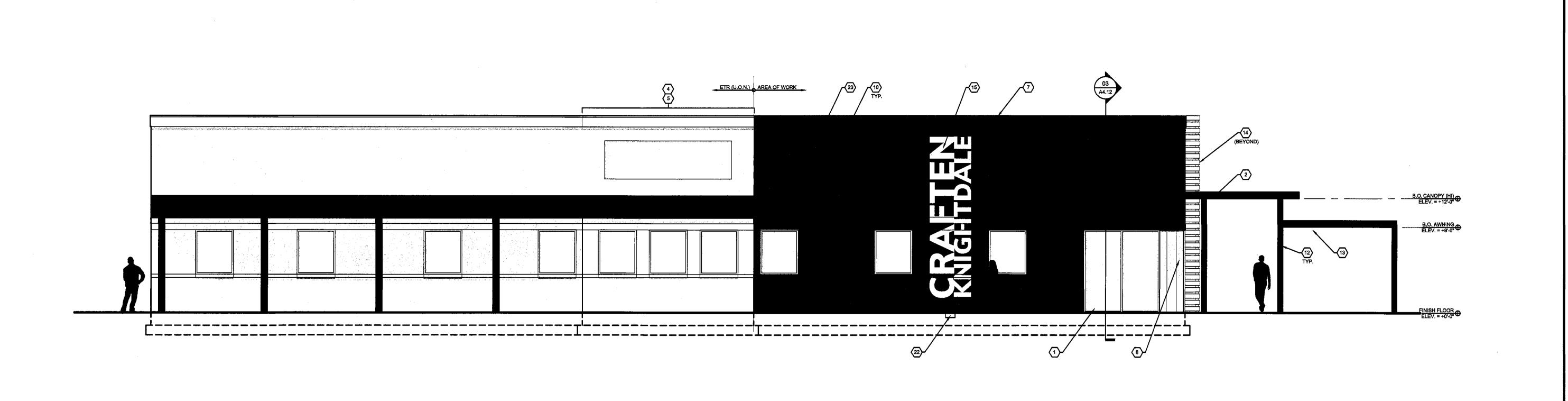
NCG01 DETAILS

REVISIONS

FILE NO. 2019-098
HORZ. SCALE: 1"=50"

D-04

VERT. SCALE: NONE



SR&

NEW WORK EXTERIOR ELEV.- SOUTH 02

Scale: 3/16" = 1'-0"

TOWN CERTIFICATION

DATE: 11-19-2020

DATE: 1(/19/20

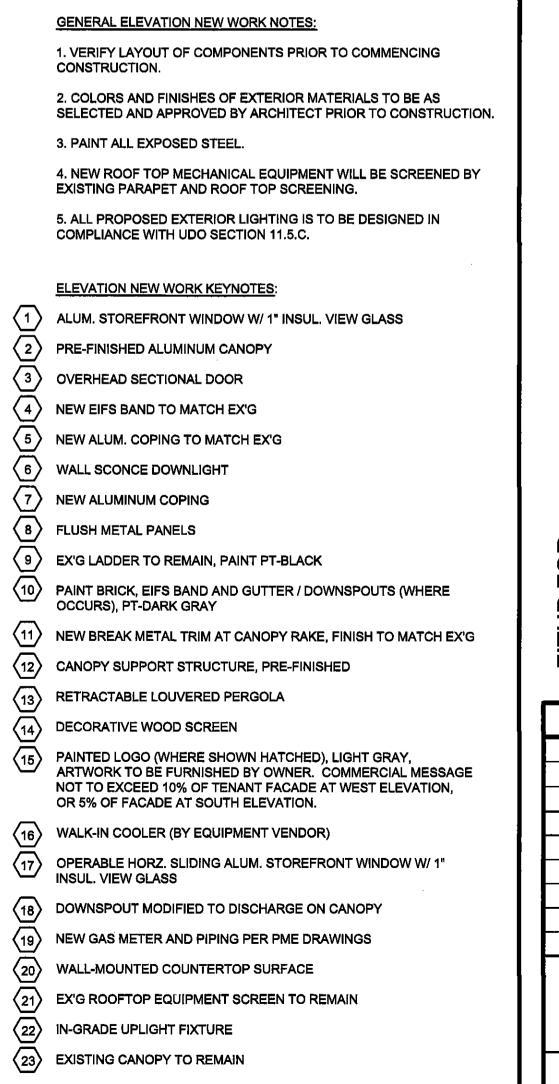
THIS DESIGN HAS BEEN REVIEWED BY THE ENGINEER FOR THE TOWN OF

THESE PLANS ARE APPROVED BY THE TOWN OF KNIGHTDALE AND SERVE

KNIGHTDALE, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT CONFORMS TO THE REQUIREMENTS ESTABLISHED IN THE STANDARD

SPECIFICATIONS OF THE TOWN OF KNIGHTDALE.

AS CONSTRUCTION PLANS FOR THIS PROJECT.



NEW WORK ELEVATION NOTES

NEW WORK EXTERIOR ELEV.- WEST

Scale: 3/16" = 1'-0"

310ai

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SUITE 250 RALEIGH, NC 27605 PHONE (919) 838-9310

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STRUCTION

PROGRESS DRAWING

aften Knightdale

PROJECT # 19118

DATE: 09 . 18 . 2020

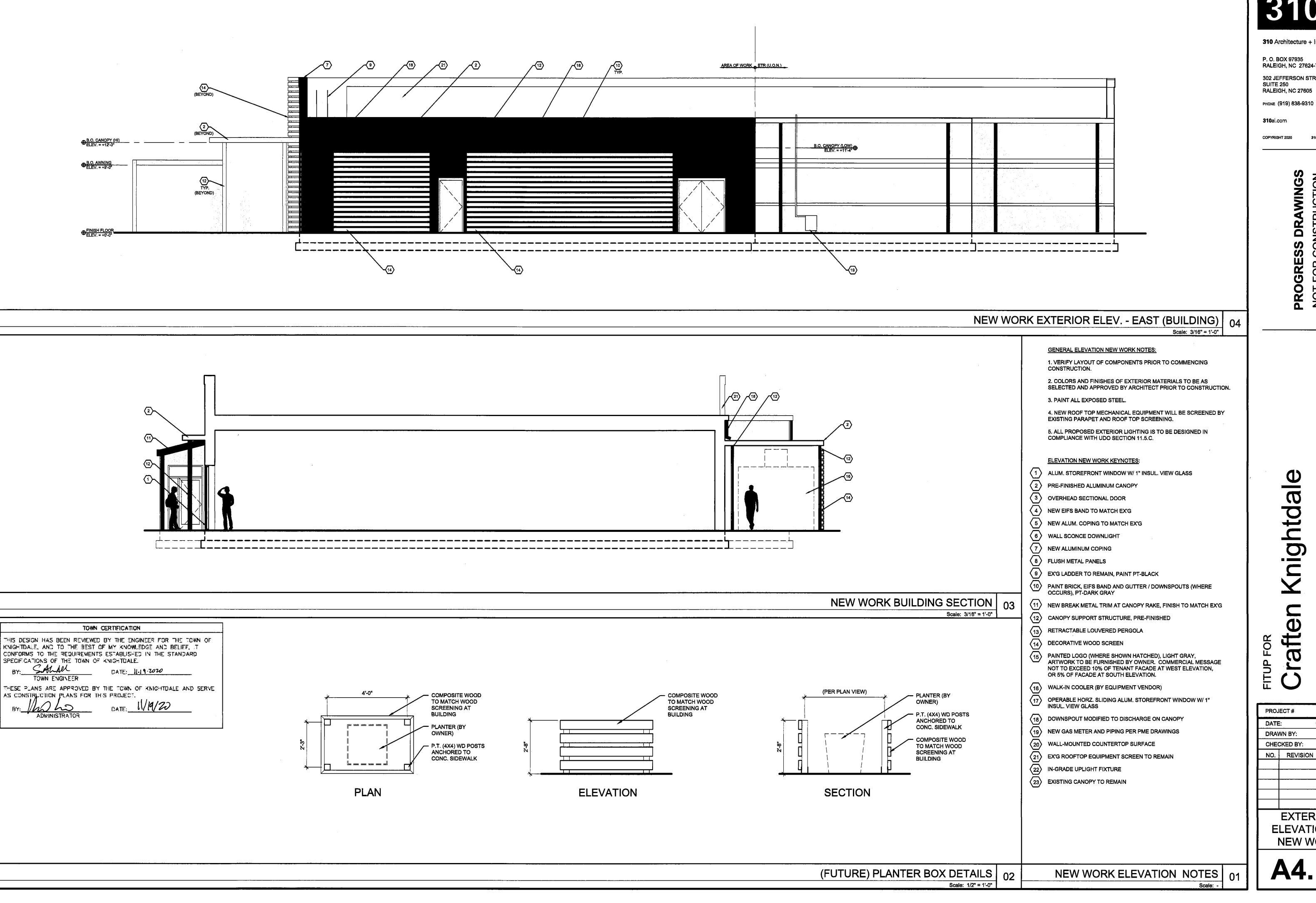
DRAWN BY: RMC, WBS

CHECKED BY: DBB, WBS

NO. REVISION DATE

EXTERIOR ELEVATIONS -NEW WORK

A4.11



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DRAWINGS **PROGRESS**

Knightdale raften

PROJECT# 19118 DATE: 09.18.2020 DRAWN BY: RMC, WBS DBB, WBS CHECKED BY: NO. REVISION DATE

Court NC 27

EXTERIOR ELEVATIONS -NEW WORK